



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,286	11/30/2001	Eric Aerts	9971-005	2124

20583 7590 06/22/2006

JONES DAY  
222 EAST 41ST ST  
NEW YORK, NY 10017

EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT PAPER NUMBER

1771

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,286

Applicant(s)

AERTS, ERIC

Examiner

Norca L. Torres-Velazquez

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,10-12,14-31 and 33-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,10-12,14-31 and 33-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 30, 2006 has been entered.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 10-11, 27-31, 33-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 10 is rejected as being dependent on canceled claim 9. For examining purposes the Examiner assumes that claim 10 depends on claim 1 instead. Claim 11 is rejected as dependent on claim 10.

5. Claim 27 recites on line 3 "the at least two layers"; it should read - - the at least two fabric layers - - for proper antecedent basis. All claims dependent on claim 27 are rejected for the same reasons.

6. Claim 33 depends on canceled claim 22. For examining purposes, the Examiner assumes that it depends on claim 27.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-7, 10-12, 27, 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH et al. (US 5,447,462) in view of BATTREALL (US 5,234,523).

Smith is concerned with the creation of a laminated fabric used in the construction of a brassiere. Smith teaches two fabrics laminated together by an open net-like film of heat sensitive adhesive. (Abstract) The fabrics are laminated by using heat and pressure. (Refer to Column 9) The reference teaches the fabric to have a cup. (Figure 13). Smith teaches applicant's claimed openings. (Figure 11) Smith further teaches the use of additional layers laminated in the same manner as the first two layers (Col. 5, lines 18-25). The reference further teaches the fabrics to be elastic and woven. (Col. 5, lines 24-34)

The Smith reference provides the fabric laminate structure of claim 1 that comprises a first fabric, a second fabric and a heat sensitive adhesive layer in between. However, it fails to teach a film that comprises polyurethane.

BATTREALL discloses a process for laminating a layer of material to a substrate used of contoured products. (Col. 1, lines 8-13) The reference teaches laminating a substrate (made from materials such as cotton), to a gas permeable layer (knitted or woven material) by means of an adhesive layer. The adhesive may be in the form of a liquid, a powder, a film or a web, and may be applied to the substrate surface in any of the conventional methods for doing so. The reference discloses the use of heat-activated adhesives such as polyolefins, polyesters, polyurethane, etc. (Col. 2, lines 14-55) With regards to the thickness of the adhesive layer, it is

Art Unit: 1771

noted that the BATTREALL reference discloses that the amounts of adhesive will vary depending on the physical characteristics of the material to be bonded. (Col. 2, lines 49-52

Applicant's have failed to show the criticality for the claimed range for the thickness of the polyurethane adhesive layer to their invention. The range of more than about 0.5 mils and less than about 4 mils is disclosed as one of the *preferred* ranges for ether-based polyurethane film adhesive but the specification fails to show evidence that the claimed polyurethane adhesive layer thickness is critical. BATTREALL teaches above that the amount of adhesive will vary depending on the physical characteristics of the material to be bonded. Therefore, the thickness of the adhesive film is recognized herein as a result effective variable in this field of endeavor and it has been held that discovering optimum values would have been or result effective variables involves only routine experimentation. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

Since both SMITH and BATTRELL et al. are directed to laminates, the purpose disclosed by BATTRELL et al. would have been recognized in the pertinent art of SMITH.

SMITH discloses the claimed invention except that it uses a polyamide heat sensitive web of an open net-like film instead of a polyurethane heat sensitive adhesive film, BATTRELL shows that polyurethane film is an equivalent structure known in the art. Therefore, because these two references were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a polyamide web of an open net-like film for a polyurethane film.

Art Unit: 1771

It is the examiner's position that the laminate from the combination of SMITH and BATTREALL is identical to or only slightly different than the laminate claimed prepared by the method of the claim(s), because both laminates are formed by two layers of fabric bonded by a polyurethane film adhesive in between. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). The SMITH in view of BATTRELL either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the prior art applied herein.

9. Claims 14-24 and 35-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH et al. (US 5,447,462) and BATTREALL (US 5,234,523) and further evidenced by RUDY (US 5,042,176).

While BATTREALL is silent to the type of polyurethane material used, the use of an ether-based polyurethane film would have been obvious since this type of material is known for its hydrolysis stability as evidenced by RUDY (Col. 13, lines 24-52) and one having ordinary

Art Unit: 1771

skill in the art of polyurethane film materials would use an ether-based polyurethane film in the production of materials that are highly exposed to water and moisture motivated by the desire of producing a material that is stable in water and moisture environments.

10. Claim 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and BATTREALL as applied above, and further in view of Kollmanthaler et al. (US 5,967,876).

Smith fails to teach the use of an insert wire. Kollmanthaler is concerned with the creation of a brassiere. Kollmanthaler teaches the use of an insert wire. (Abstract) It would have been obvious to a person having ordinary skill in the art to utilize an insert wire in the bra of Smith. Such a combination would have been motivated by the desire to provide further support to the wearer of the garment, for example, the use of insert wires will be useful in enhancing the support the brassiere for a wearer with full figure. It is the Examiner's position that the use of an insert wire to provide an enhanced support would be recognized in the art of Smith.

11. Claims 28-31 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and BATTREALL as applied above, and further in view of Tedeschi et al. (US 5,984,762).

Smith teaches the use of a strap but fails to teach cushioning said strap. Tedeschi is concerned with the creation of a bra strap. Tedeschi teaches applicant's claimed cushioning layers. (Abstract).

With respect to the process limitations of prelaminating the adhesive, it is the Examiner's it is the examiner's position that the laminate fabric and brassiere created by the combination of Smith and Tedeschi is identical to or only slightly different than the presently claimed laminate

Art Unit: 1771

and brassiere prepared by the method of the claim(s), because both structures have a first fabric laminated to a second fabric by an adhesive in between. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

### ***Response to Arguments***

12. Applicant's arguments filed 3/30/06 have been fully considered but they are not persuasive.

a. Applicants have amended the claims to now recite a polyurethane adhesive layer with a thickness of more than about 0.5 mils and less than about 4 mils. The Specification provides support for the narrower range as one of the preferred embodiments of their invention, however, it is noted that Applicants have failed to show that the now claimed range is critical. The range of more than about 0.5 mils and less than about 4 mils is disclosed as one of the *preferred* ranges for ether-based polyurethane film adhesive but the specification fails to show evidence that the claimed polyurethane adhesive layer thickness is critical as to provide unexpected results when such a narrow range of adhesive is used. BATTREALL teaches above that the amount of adhesive will




Art Unit: 1771

vary depending on the physical characteristics of the material to be bonded. Therefore, the thickness of the adhesive film is recognized herein as a result effective variable in this field of endeavor and it has been held that discovering optimum values would have been or result effective variables involves only routine experimentation. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Norca L. Torres-Velazquez  
Primary Examiner  
Art Unit 1771

June 20, 2006